

Sulphur compounds such as ammonium sulphate are also being increasingly applied as a fertiliser in the early summer on grasslands cut for silage. Ringlet larvae would therefore be exposed to such treated areas throughout their development, which might explain why Ringlets are so rarely seen on improved grasslands. Until recently south Fife has been downwind of heavy industries and coal-burning generating plants which have produced considerable airborne sulphur pollutants. Has the higher ground of the Lomonds and Cult ridge been sufficient to restrict air borne drift into the north of the county and enabled the Ringlet to survive there? At any rate the rapid spread of Ringlet back to the south of Fife over the past 15 years is correlated with a decrease in heavy industrial activity upwind and the need for farmers in the east of Scotland to apply sulphur compounds to crops.

The apparent connection of Ringlet distribution and the possible effects of sulphur products on its larval food plants is a subject which warrants further investigation by laboratory studies.— P.K. KINNEAR, 20 East Queen Street, Newport-on-Tay, Fife DD6 8AY.

***Clitostethus arcuatus* (Rossi) (Col.: Coccinellidae) from malaise traps in Northamptonshire, Norfolk and Hampshire**

A single specimen of this distinctive small ladybird was taken by RCW between 5 and 8 August 1995 in a malaise trap in the wooded part of a rural garden at Hemington, Northamptonshire (OS grid reference TL 091852). Three further specimens have recently been identified among malaise trap samples collected by staff of the Entomology Branch of Forest Research (Forestry Commission) Alice Holt, between 14 and 28 June 1995, as part of their national Biodiversity Research Programme. Two were from a pre-thicket Scots pine plantation at Lynford, Thetford Forest, Norfolk (TL 833901), and the other from mature Scots pine in Denny Lodge Inclosure, New Forest, Hampshire (SU 341038).

Hyman & Parsons (1992. *Review of the scarce and threatened Coleoptera of Great Britain. Part 1*. UK Joint Nature Conservation Committee, Peterborough) list *Clitostethus arcuatus* (Rossi) as an RDB1, Endangered, species "recorded from Surrey, Berkshire, Oxfordshire, East Suffolk and Leicestershire before 1970 and from Oxfordshire and East Suffolk from 1970 onwards". At the time he wrote his New Naturalist monograph (1994. *Ladybirds*. Harper Collins), Michael Majerus was unaware of any additional recent records for this species, but in October 1993 I.S. Menzies (1994, *Br. J. Ent. Nat. Hist.* 7: 172) had exhibited two specimens collected during 1993 from Bookham Common, Surrey (TQ 1255). One was beaten from holly beneath oak on 29 February, and the other was beaten from ivy on an oak trunk on 14 August. He also reported that Dr R.G. Booth had taken single examples at the same locality on 7 March 1992 and 6 March 1993. According to Majerus (1994, *op.cit.*) *Clitostethus arcuatus* may be associated with ivy on deciduous and coniferous trees where it feeds on the eggs of whitefly. D.B. Shirt (1987, *British Red Data Book 2 Insects*. NCC) reports how N.J. Mills found a breeding colony of *Clitostethus* in Oxford during 1979 and 1980 (but not 1981) on a bush of *Viburnum tinus* infested with whitefly.

As its name implies, the horseshoe-shaped, creamy-yellow mark on the elytra is characteristic of this species, although coloration of the rest of the elytra and pronotum appears to show considerable variation. The ground colour may range from black to a chestnut-brown and a second, less distinct, arc is variably developed posterior and lateral to the main arc. The centre of the pronotum may be black with lateral margins yellow, or the black may be restricted to the hind margin and a few central spots. The head is dark with legs and antennae yellow. The whole body, particularly the elytra, is covered with a short, fine, dense pubescence.— R. COLIN WELCH, The Mathom House, Hemington, Peterborough PE8 6QJ & MARTIN R. JUKES, Forest Research, Alice Holt Lodge, Farnham, Surrey GU10 4LH.

Update of early emergences of moths at Selborne

I have written before of the tendency towards early emergences of moths at Selborne in 1992-94 (Aston, *Ent. Rec.* **106**: 116; **107**: 4; **107**: 191; **110**: 54 and **110**: 189). This table now permits comparison with my earliest records of spring species in 1995-1997. The m.v. light was run on just over 320 nights during each year of the survey. In a few cases, the first spring specimen was observed during the preceding December: for example, the first *Apocheima pilosaria* of 1996 is taken to be that seen on 12 December 1995. In eight of these species, earliness for this site is either maintained or increased.

Species	1995-1997	1992-1994	MBGBI imago
1926 <i>Apocheima pilosaria</i> (D.&S.)	12 Dec 1995	26 Dec 1992	Jan-Mar
2190 <i>Orthosia gothica</i> (L.)	12 Dec 1994	29 Jan 1993	Mar-May
1932 <i>Agriopis leucophaearia</i> (D.&S.)	14 Jan 1995	29 Jan 1993	Feb, Mar
1960 <i>Theria primaria</i> (Haw.)	18 Jan 1995	9 Jan 1994	Jan, Feb
2243 <i>Xylocampa areola</i> (Esper)	19 Jan 1996	2 Mar 1992	Mar-May
1934 <i>Agriopis marginaria</i> (Fabr.)	1 Feb 1995	10 Feb 1994	Feb-May
2187 <i>Orthosia cerasi</i> (Fabr.)	7 Feb 1995	8 Feb 1994	Mar-May
1663 <i>Alsophila aescularia</i> (D.&S.)	12 Feb 1995	4 Feb 1994	Mar, Apr
1930 <i>Biston strataria</i> (Hufn.)	15 Feb 1995	4 Feb 1994	Mar, Apr
1947 <i>Ectropis bistortata</i> (Goeze)	20 Feb 1995	7 Mar 1994	Mar, Apr
1746 <i>Anticlea badiata</i> (D.&S.)	21 Feb 1995	27 Feb 1994	Mar, Apr
2182 <i>Orthosia cruda</i> (D.&S.)	27 Feb 1995	17 Feb 1993	Mar, Apr